Band Heater

MALTEC-H

Band heaters are aluminized steel strip heaters formed to a semicircle and supplied in pairs. A spring at the terminal end keeps the heater halves in contact with the barrel andcompensates for thermal expansion. The other end is fastened by a captive chrome plated allen screw for ease of installation. Band heaters are ring-shaped heating devices that clamp around a cylindrical element. Heat transfer from band heaters occurs via the conductive method. Most band heaters clamp around the outer diameter of a cylindrical element and heat the element from the outside. Band heaters are designed to clamp to an exterior or interior cylindrical surface. Band heaters often have higher watt densities allowing fast heat-up and operating temperatures. They generally include clamp assemblies making installation easy. Band heaters are used for injection molding barrels and nozzles, extrusion and molding presses, pipe heating, heat treating and autoclaves, food industry and other applications.

Application

Band heaters are ring-shaped heating devices that clamp around a cylindrical element. Heat transfer from band heaters occurs via the conductive method. Most band heaters clamp around the outer diameter of a cylindrical element and heat the element from the outside. Some products clamp around the inner diameter of a pipe. Typically, band heaters are equipped with ceramic or mineral insulation to reduce heat loss to the environment.

- Barrels on plastic extruders
- Blown film dies
- Injection and blow molding machines
- Cylinder heating application
- Autoclaves
- Vending machines
- Blow-molding machines
- Pipe or tank heating
- Food industry
- Rubber machinery
- Printing Equipment

Band Heater

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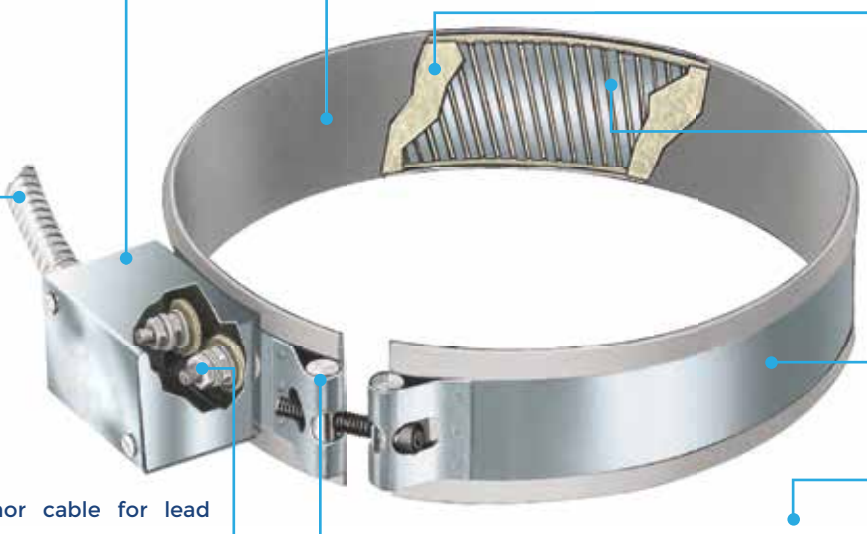
A General purpose terminal box that offers excellent protection to exposed terminals. To simplify wiring, the box has a 1/2" trade size knockout (actual diameter 7/8") that will accept standard conduit or fexible armor cable connectors. It can be field assembled on most band heaters with screw terminals having a center distance of 7/8".

E Specially treated rust-resistant steel sheath casing provides the best combination of physical strength, high emissivity and good thermal conductivity to heated cylindrical parts, good for sheath temperatures up to 900°F (480°C)..



B Flexible armor cable for lead protection is available where abrasion is a problem.

F Specially selected grade and thickness of mica sheet is used to insulate the windings, providing excellent thermal conductivity and dielectric strength.

C For maximum surface contact, the torque resistant and unbreakable stainless steel screw terminals are securely fastened to a connecting jumper, assuring positive contact with the windings and providing maximum amperage carrying capacity.

G Built-In-Strap with a unique design and feature. A low thermal expansion alloy sheath is used to the outer sheath, covering the entire width of the band heater.

D Specially designed mounting brackets with 1/4"-20 socket cap screws are used to draw the Built-In-Strap to a high degree of tension. This tension exerts the great amount of drawing power required to pull the heating element assembly against the cylinder evenly and tightly across its entire width of a band heater increases.

H The gauge of nickel-chrome resistance ribbon wire is selected to achieve the lowest internal element temperatures possible, resulting in maximum heater life. The ribbon wire is wound evenly spaced on a specially selected mica strip, providing even heat distribution and thus eliminating hotspotting that can pause premature heater failure.